Wall Mounted Type Series

Neo Forte with EEV : ND✳✳✳QH✳✳✳

Air Conditioner
user & installation manual

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R410A

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Features of your new air conditioner

- **Cool Summer Offer**

  On those hot sweltering summer days and long restless nights, there is no better escape from the heat than the cool comforts of home. Your new air conditioner brings an end to exhausting hot summer days and lets you rest. This summer, beat the heat with your own air conditioner.

- **Cost Efficient System**

  Your new air conditioner not only provides maximum cooling power in the summer, but can also be an efficient heating method in the winter with the advanced "Heat pump" system. This technology is up to 300% more efficient than electrical heating, so you can further reduce its running cost. Now, meet year-round needs with one air conditioner.

- **A Look for Everywhere**

  The elegant and harmonious design gives priority to the esthetics of your space and complements any of your existing interior décor. With its soft color and rounded-edge shape, the new air conditioner adds class to any room. Enjoy what your air conditioner offers both functionally and esthetically.

- **good'sleep function**

  good'sleep mode allows you to set a comfortable sleep temperature while saving energy and having sound sleep.

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For easy future reference, write the model and serial number down. You will find your model number on the right side of the air conditioner.

Model #_____
Serial #_____

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ENGLISH

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Safety precautions

Before using your new air conditioner, please read this manual thoroughly to ensure that you know how to safely and efficiently operate the extensive features and functions of your new appliance.

Because the following operating instructions cover various models, the characteristics of your air conditioner may differ slightly from those described in this manual. If you have any questions, call your nearest contact center or find help and information online at www.samsung.com.

Important safety symbols and precautions:

WARNING	Hazards or unsafe practices that may result in **severe personal injury or death.**
CAUTION	Hazards or unsafe practices that may result in **minor personal injury or property damage.**

	Follow directions.
	Do NOT attempt.
	Make sure the machine is grounded to prevent electric shock.
	Unplug the power plug from the wall socket.
	Do NOT disassemble.

FOR INSTALLATION | WARNING

Use the power line with the power specifications of the product or higher and use the power line for this appliance only. In addition, do not use an extension line.

- Extending the power line may result in electric shock or fire.
- Do not use an electric transformer. It may result in electric shock or fire.
- If the voltage/frequency/rated current condition is different, it may cause fire.

The installation of this appliance must be performed by a qualified technician or service company.

- Failing to do so may result in electric shock, fire, explosion, problems with the product, or injury.

Install a switch and circuit breaker dedicated to the air conditioner.

- Failing to do so may result in electric shock or fire.

Fix the outdoor unit firmly so that the electric part of the outdoor unit is not exposed.

- Failing to do so may result in electric shock or fire.

Do not install this appliance near a heater, inflammable material. Do not install this appliance in a humid, oily or dusty location, in a location exposed to direct sunlight and water (rain drops). Do not install this appliance in a location where gas may leak.

- This may result in electric shock or fire.

Never install the outdoor unit in a location such as on a high external wall where it could fall.

- If the outdoor unit falls, it may result in injury, death or property damage.

This appliance must be properly grounded. Do not ground the appliance to a gas pipe, plastic water pipe, or telephone line.

- Failure to do so may result in electric shock, fire, an explosion, or other problems with the product.
- Never plug the power cord into a socket that is not grounded correctly and make sure that it is in accordance with local and national codes.

FOR INSTALLATION | CAUTION

Install your appliance on a level and hard floor that can support its weight.

- Failing to do so may result in abnormal vibrations, noise, or problems with the product.

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FOR INSTALLATION | ⚠ CAUTION

Install the draining hose properly so that water is drained correctly.

- Failing to do so may result in water overflowing and property damage.

When installing the outdoor unit, make sure to connect the draining hose so that draining is performed correctly.

- The water generated during the heating operation by the outdoor unit may overflow and result in property damage. In particular, in winter, if a block of ice falls, it may result in injury, death or property damage.

FOR POWER SUPPLY | ⚠ WARNING

When the circuit breaker is damaged, contact your nearest service center.

Do not pull or excessively bend the power line. Do not twist or tie the power line. Do not hook the power line over a metal object, place a heavy object on the power line, insert the power line between objects, or push the power line into the space behind the appliance.

- This may result in electric shock or fire.

FOR POWER SUPPLY | ⚠ CAUTION

When not using the air conditioner for a long period of time or during a thunder/lightning storm, cut the power at the circuit breaker.

- Failing to do so may result in electric shock or fire.

FOR USING | ⚠ WARNING

If the appliance is flooded, please contact your nearest service center.

- Failing to do so may result in electric shock or fire.

If the appliance generates a strange noise, a burning smell or smoke, unplug the power plug immediately and contact your nearest service center.

- Failing to do so may result in electric shock or fire.

In the event of a gas leak (such as propane gas, LP gas, etc.), ventilate immediately without touching the power line. Do not touch the appliance or power line.

- Do not use a ventilating fan.
- A spark may result in an explosion or fire.

To reinstall the air conditioner, please contact your nearest service center.

- Failing to do so may result in problems with the product, water leakage, electric shock, or fire.
- A delivery service for the product is not provided. If you reinstall the product in another location, additional construction expenses and an installation fee will be charged.
- Especially, when you wish to install the product in an unusual location such as in an industrial area or near the seaside where it is exposed to the salt in the air, please contact your nearest service center.

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Safety precautions

FOR USING | ⚠ WARNING

Do not touch the circuit breaker with wet hands.
- This may result in electric shock.

Do not strike or pull the air conditioner with excessive force.
- This may result in fire, injury, or problems with the product.

Do not place an object near the outdoor unit that allows children to climb onto the machine.
- This may result in children seriously injuring themselves.

Do not turn the air conditioner off with the circuit breaker while it is operating.
- Turning the air conditioner off and then on again with the circuit breaker may cause a spark and rsult in electric shock or fire.

After unpacking the air conditioner, keep all packaging materials well out of the reach of children, as packaging materials can be dangerous to children.
- If a child places a bag over its head, it may result in suffocation.

Do not insert your fingers or foreign substances into the outlet when the air conditioner is operating.
- Take special care that children do not injure themselves by inserting their fingers into the product.

Do not touch the air flow blade with your hands or fingers during the heating operation.
- This may result in electric shock or burns.

Do not insert your fingers or foreign substances into the air inlet/outlet of the air conditioner.
- Take special care that children do not injure themselves by inserting their fingers into the product.

Do not use this air conditioner for long periods of time in badly ventilated locations or near infirm people.
- Since this may be dangerous due to a lack of oxygen, Open a window at least once an hour.

If any foreign substance such as water has entered the appliance, cut the power by unplugging the power plug and turning the circuit breaker off and then contact your nearest service center.
- Failing to do so may result in electric shock or fire.

Do not attempt to repair, disassemble, or modify the appliance yourself.
- Do not use any fuse (such as cooper, steel wire, etc.)other than the standard fuse.
- Failing to do so may result in electric shock, fire, problems with the product, or injury.

FOR USING | ⚠ CAUTION

Do not place objects or devices under the indoor unit.
- Water dripping from the indoor unit may result in fire or property damage.

Check that the installation frame of the outdoor unit is not broken at least once a year.
- Failing to do so may result in injury, death or property damage.

Max current is measured according to IEC standard for safety and current is measured according to ISO standard for energy efficiency.

Do not stand on top of the appliance or place objects (such as laundry, lighted candles, lighted cigarettes, dishes, chemicals, metal objects, etc.) on the appliance.
- This may result in electric shock, fire, problems with the product, or injury.

Do not operate the appliance with wet hands.
- This may result in electric shock.

Do not spray volatile material such as insecticide onto the surface of the appliance.
- As well as being harmful to humans, it may also result in electric shock, fire or problems with the product.

Do not drink the water from the air conditioner.
- The water may be harmful to humans.

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FOR USING | ⚠ CAUTION

Do not apply a strong impact to the remote controller and do not disassemble the remote controller.

Do not touch the pipes connected with the product.

- This may result in burns or injury.

Do not use this air conditioner to preserve precision equipment, food, animals, plants or cosmetics, or for any other unusual purposes.

- This may result in property damage.

Avoid directly exposing humans, animals or plants from the air flow from the air conditioner for long periods of time.

- This may result in harm to humans, animals or plants.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

FOR CLEANING | ⚠ WARNING

Do not clean the appliance by spraying water directly onto it. Do not use benzene, thinner, alcohol or acetone to clean the appliance.

- This may result in discoloration, deformation, damage, electric shock or fire.

Before cleaning or performing maintenance, unplug the air conditioner from the wall socket and wait until the fan stops.

- Failing to do so may result in electric shock or fire.

FOR CLEANING | ⚠ CAUTION

Take care when cleaning the surface of the heat exchanger of the outdoor unit since it has sharp edges.

- To avoid cutting your fingers, wear thick cotton gloves when cleaning it.

Do not clean the inside of the air conditioner by yourself.

- For cleaning inside the appliance, contact your nearest service center.
- When cleaning the internal filter, refer to the descriptions in the 'Cleaning and maintaining the air conditioner' section.
- Failure to do may result in damage, electric shock or fire.

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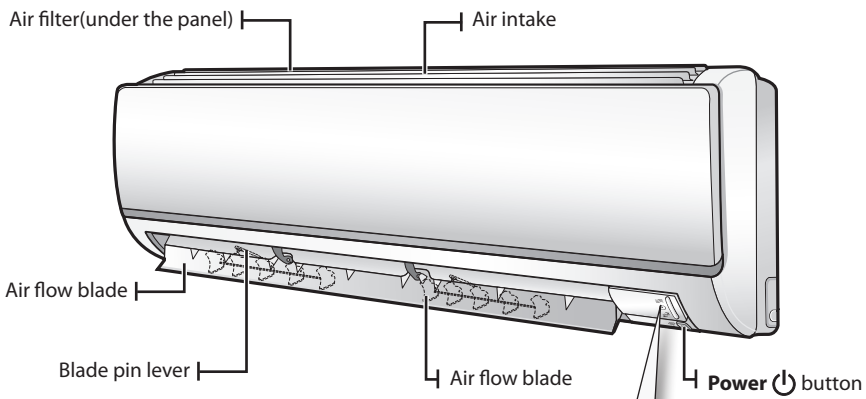
Viewing your air conditioner

Congratulations on the purchase of the air conditioner. We hope you enjoy the features of your air conditioner and stay cool or warm with optimal efficiency.
Please read the user manual to get started and to make the best use of the air conditioner.

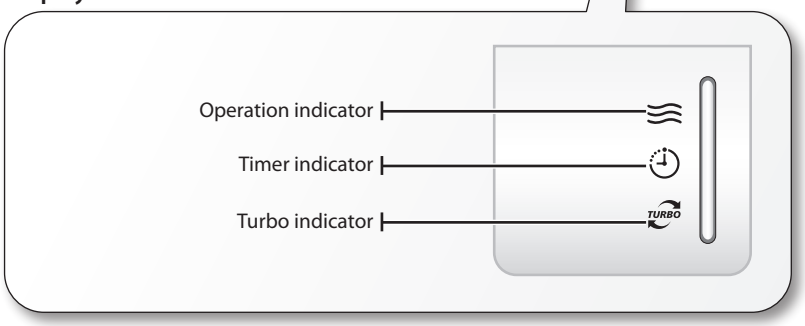
CHECKING THE INDOOR UNIT AND DISPLAY

Carefully unpack your air conditioner, and check the unit to make sure it is not damaged.

Main parts



Display



Your air conditioner may slightly look different from illustration shown above depending on your model.

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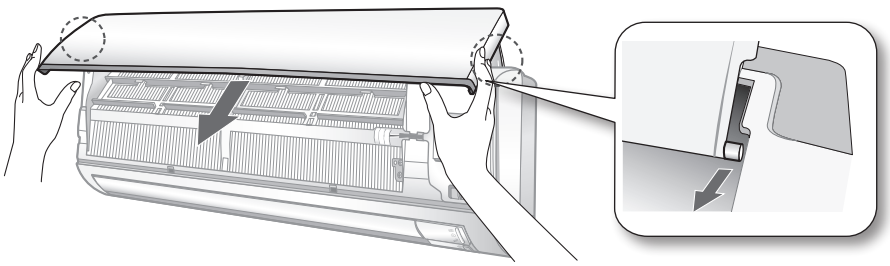
REMOVING THE FRONT PANEL

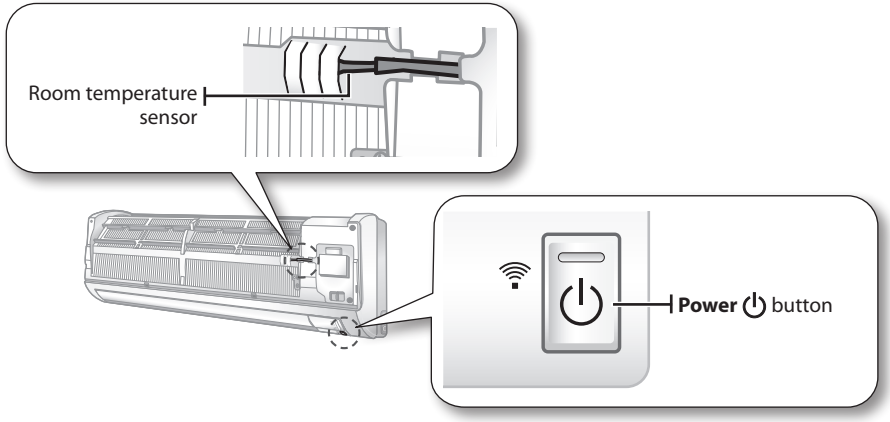
Tightly grab both side of the front panel and lift up the panel to open. Then slide the panel towards to remove the panel.



Power button and Room temperature sensor

You may locate the **Power** ⏻ button on the right bottom side of the air conditioner. If the front panel is open, you can check the room temperature sensor.

You can turn on the air conditioner without the remote control by pressing the **Power** ⏻ button. The room temperature sensor measures indoor room temperature.



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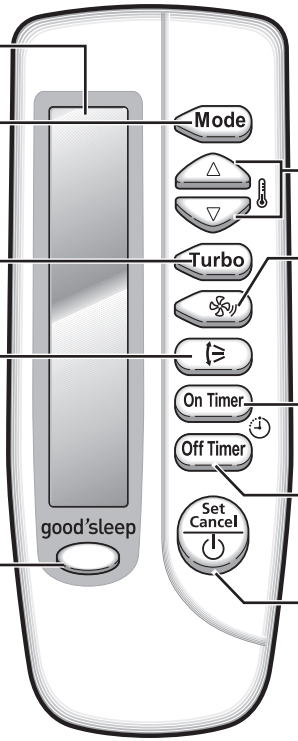
Viewing your air conditioner

CHECKING THE REMOTE CONTROL

You can activate the air conditioner by pointing the remote control away from it. When using the remote control, always point it directly at the air conditioner.



Remote control display

Mode
Set one of the 5 operating modes. (See pages 12~16 for instructions.)

Turbo
Operate in maximum fan speed to cool/warm quickly.

Air swing
Activate/Deactivate air flow blade movement automatically up and down.

good' sleep
Set the good' sleep mode on/off.

Temperature ▲▼
Increase/decrease the temperature by 1˚C.

Fan speed
Adjust how much air flows through the air conditioner with the 4 different fan speeds such as Auto/Low/Medium/High.

On timer
Set the on timer on.
Adjust the time for On timer.

Off timer
Set the off timer on.
Adjust the time for Off timer.

Power & Set/Cancel
Turn on/off the air conditioner and set/cancel the timer function.

Each time you press the button, a short beep will sound and a transmit indicator appears on the remote control display.

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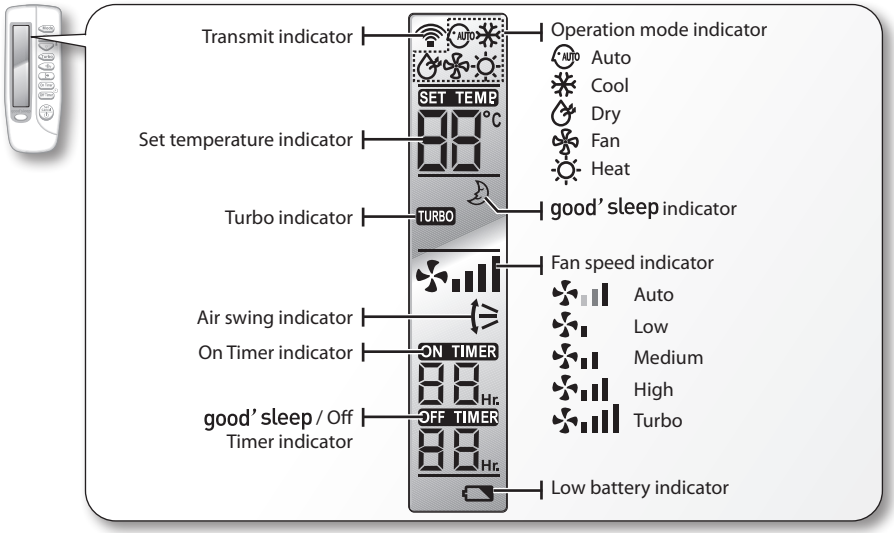
Remote control display

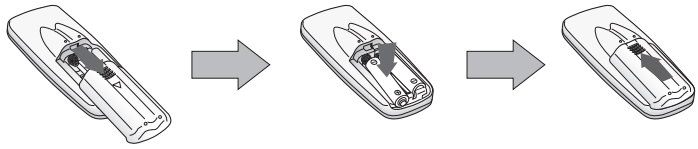


Using the remote control

- Point the remote control towards the remote control sensor of the unit.
- When properly pressing the button on the remote control, you will hear beep sound from the unit.

- The signal may not be received well of electronic lighting style fluorescent lamps, such as inverter fluorescent lamps are in the same space.
- If other electrical products operate by the remote control, call your nearest contact center.

Installing the batteries



1. **Slide the cover, on the rear side of the remote control, down to open.**
2. **Install two AAA batteries.**
   Check and match the "+" and "-" signs accordingly. Make sure you have installed the batteries in correct position.
3. **Close the cover by sliding it back to its original position.**
   You should hear click sound when the cover is locked properly.

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Operating basic function

TURNING THE AIR CONDITIONER ON AND OFF

Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

You will hear a ringing sound and the air flow blade will move up and down automatically when the air conditioner is properly on.
The air conditioner will operate in the most recent operation mode used or Auto mode.

When you turn off the air conditioner, air flow blade will stop moving and remain closed.

Turning on/off your air conditioner without the remote control.

You can operate your air conditioner by pressing the **Power** ⏻ button on the right bottom side of the air conditioner.

SELECTING OPERATION MODE

Auto

In Auto mode, the air conditioner will automatically set the temperature and fan speed depending on the room temperature detected by the room temperature sensor.

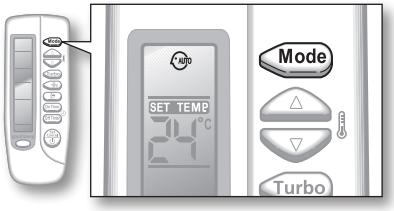
1. Turn on the air conditioner.

   Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

2. Set the operating mode.

   Press the **Mode** button on the remote control until Auto mode and Auto fan speed indicator appear on the remote control display.

   The air conditioner will automatically set the operation mode to Cool or Heat depends on the room temperature.

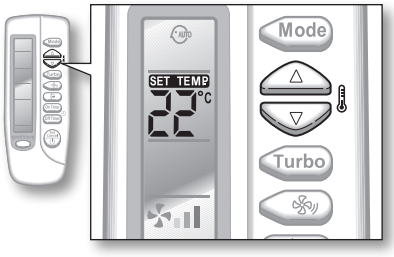


When you press the **Mode** button, mode will change in order of Auto, Cool, Dry, Fan and Heat.

3. Set the Temperature.

   Press the **Temperature** ▲ or ▼ button on the remote control to increase or decrease the desired temperature.

   You can set the desired temperature between the range of 16˚C~30˚C.



You can increase/decrease the temperature by 1˚C.

- When the air conditioner is already operating in another mode, press the **Mode** button until Auto mode indicator appears on the remote control display.
- When you are using the remote control, make sure correct indicator which matches your selection appears on the remote control display.
- Air flow can be adjusted manually.(See page 17 for instructions.)

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Cool

In Cool mode, the air conditioner will cool your room. You can adjust the temperature and the fan speed to feel cooler in hot season.

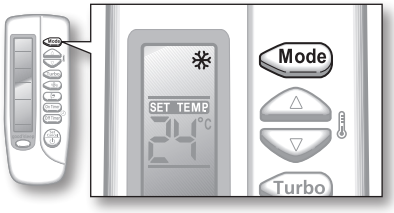
1. Turn on the air conditioner.

Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

2. Set the operating mode.

Press the **Mode** button on the remote control until Cool mode indicator appears on the remote control display.

The air conditioner operates in Cool mode and will lower the temperature in your room.

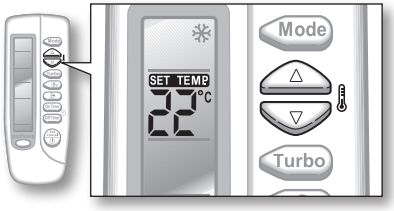


When you press the **Mode** button, mode will change in order of Auto, Cool, Dry, Fan and Heat.

3. Set the temperature.

Press the **Temperature** ▲ or ▼ button on the remote control to increase or decrease the desired temperature.

You can set the desired temperature between the range of 16˚C~30˚C.

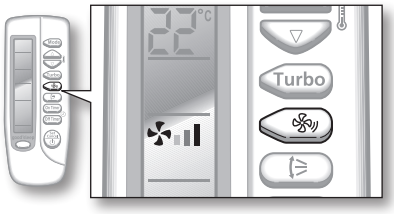


You can increase/decrease the temperature by 1˚C.

4. Set the fan speed.

Press the **Fan Speed** button on the remote control to set the desired fan speed.

If room temperature reaches desired value, the air conditioner will shut off cooling for a while and just the fan runs.



When you press the **Fan Speed** button, fan speed will change in order of Auto, Low, Medium and High.

- When you are using the remote control, make sure correct indicator which matches your selection appears on the remote control display.
- Air flow can be adjusted manually.(See page 17 for instructions.)
- If current outside temperatures are much higher than the selected indoor temperature, it may take time to bring the inner temperature to the desired coolness.

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Operating basic function

SELECTING OPERATION MODE

Dry

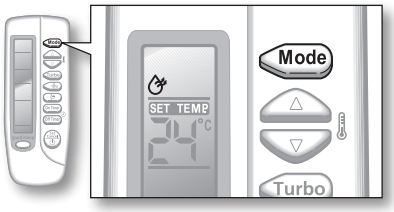
The air conditioner in Dry mode acts like a dehumidifier by removing moisture from the indoor air. Dry mode makes the air feel refreshing in a humid climate.

1. Turn on the air conditioner.

Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

2. Set the operating mode.

Press the **Mode** button on the remote control until Dry mode indicator appears on the remote control display.
The air conditioner operates in Dry mode and automatically adjusts the fan speed to Auto.

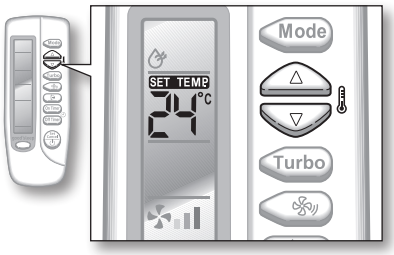


When you press the **Mode** button, mode will change in order of Auto, Cool, Dry, Fan and Heat.

3. Set the temperature.

Press the **Temperature** ▲ or ▼ button on the remote control to increase or decrease the desired temperature.

You can set the desired temperature between the range of 18˚C~30˚C.



You can increase/decrease the temperature by 1˚C.

- When you are using the remote control, make sure correct indicator which matches your selection appears on the remote control display.
- Air flow can be adjusted manually.(See page 17 for instructions.)

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Fan

Fan mode can be selected to ventilate your room. Fan mode will be helpful to refresh the stale air in your room.

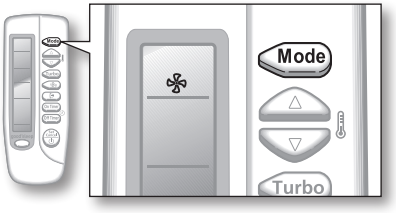
1. Turn on the air conditioner.

Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

2. Set the operating mode.

Press the **Mode** button on the remote control until Fan mode indicator appears on the remote control display.

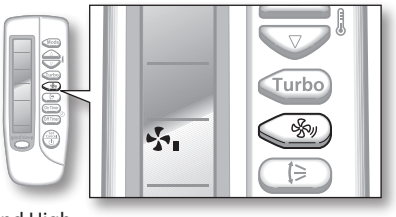
The air conditioner operates in Fan mode and automatically adjusts the temperature according to the current room temperature.



When you press the **Mode** button, mode will change in order of Auto, Cool, Dry, Fan and Heat.

3. Set the fan speed.

Press the **Fan Speed** button on the remote control to set the desired fan speed.



When you press the **Fan Speed** button, fan speed will change in order of Auto, Low, Medium and High.

- When you are using the remote control, make sure correct indicator which matches your selection appears on the remote control display.
- Air flow can be adjusted manually.(See page 17 for instructions.)

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Operating basic function

SELECTING OPERATION MODE

Heat

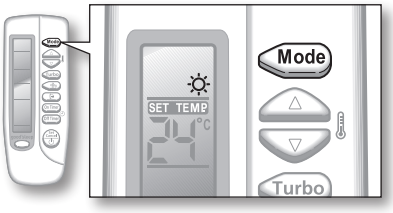
The air conditioner heats as well as cools. Warm your room with this versatile appliance in the cold of winter.

1. Turn on the air conditioner.

Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

2. Set the operating mode.

Press the **Mode** button on the remote control until Heat mode indicator appears on the remote control display.
The air conditioner operates in Heat mode and warms your room.

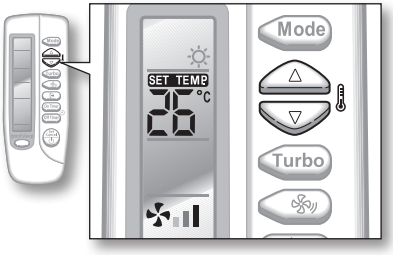


When you press the **Mode** button, mode will change in order of Auto, Cool, Dry, Fan and Heat.

3. Set the temperature.

Press the **Temperature** ▲ or ▼ button on the remote control to increase or decrease the desired temperature.

You can set the desired temperature between the range of 16˚C~30˚C.

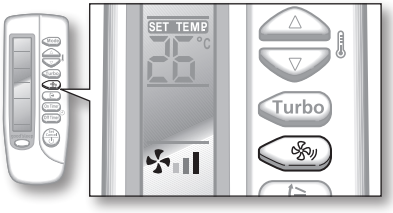


You can increase/decrease the temperature by 1˚C.

4. Set the fan speed.

Press the **Fan Speed** button on the remote control to set the desired fan speed.

If room temperature reaches desired value, heating will stop for a while.



- When you press the **Fan Speed** button, fan speed will change in order of Auto, Low, Medium and High.
- Fan may not operate for about 3~5 minutes at the beginning to prevent any cold blasts while the air conditioner is warming up.

- Air flow can be adjusted manually.(See page 17 for instructions.)
- Since the air conditioner heats the room by taking heat energy from outdoor air, the heating capacity may decrease when outdoor temperatures are extremely low. If you feel the air conditioner insufficiently heats, using an additional heating appliance in combination with the air conditioner is recommended.

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ADJUSTING THE AIR FLOW DIRECTION

Air flow can be directed to your desired position.

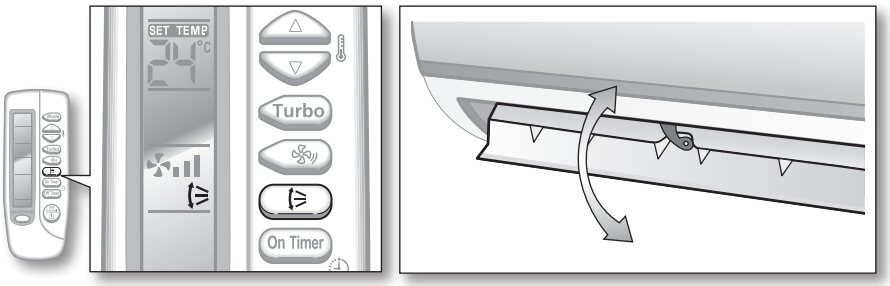
Vertical air flow

Air flow blades move up and down.

1. Press the **Air swing** button on the remote control.

Air swing indicator will be on and air flow blades move up and down continuously to circulate the air.

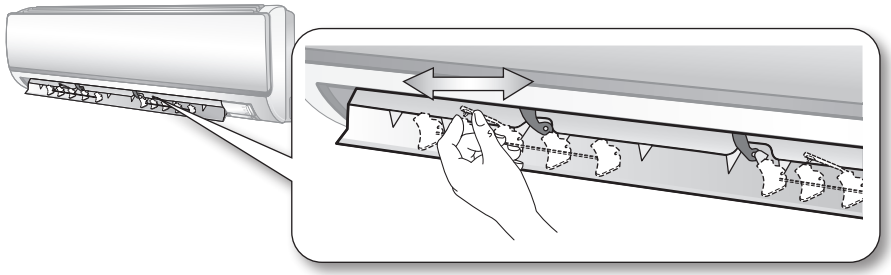
To keep the air flow direction in a constant position, press the **Air swing** button on the remote control again.



Horizontal air flow

Make sure one of the blade pins that stick out of the air flow blades are not broken.

1. Move the blade pin lever left or right to keep the air flow direction in a constant position you prefer.



CAUTION Be extremely careful with your fingers while adjusting the Horizontal air flow direction. There is a potential risk of personal injury when the unit is mishandled.

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Using advanced functions

USING THE TURBO FUNCTION

Turbo function will be helpful to cool or heat your room quickly and effectively by operating at the maximum fan speed for 30 minutes.

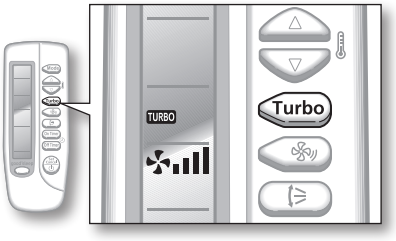
1. Turn on the air conditioner.

   Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

2. Set the operating mode.

   Press the **Turbo** button on the remote control until Turbo indicator appears on the remote control display.

   The air conditioner operates in Turbo fan speed and automatically adjusts the temperature according to the current room temperature. The unit operates for 30 minutes and then operates in last used mode, or in Auto mode if Dry/Fan mode is most recent mode used.



Turbo function is only available in Auto/Cool/Heat mode. If Turbo function is selected in Dry/Fan mode, operating mode changes to Auto.

To deactivate Turbo function

1. Press the **Turbo** button on the remote control again.

   The air conditioner operates in last used mode, or in Auto mode if Dry/Fan mode is most recent mode used.

- When you are using the remote control, make sure corresponding indicator appears on the remote control display.
- Temperature/Fan speed cannot be adjusted while using this function.
- Air flow can be adjusted manually.(See page 17 for instructions.)
- When the Turbo function is activated, pressing **Mode** button will automatically cancel the function.

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SETTING THE TIMER

This advanced Timer function allows you to turn on/off your air conditioner automatically even when you are away. Simply set the time and your air conditioner will turn on/off automatically.

On timer

This function allows you to turn on the air conditioner automatically within the time range of 24 hours. On timer is available while your air conditioner is on/off.

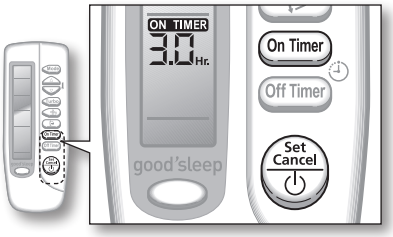
1. Press the **On Timer** button on the remote control.

   On timer indicator blinks on the remote control display.

2. Set the time you want the air conditioner to turn on automatically.

   Press the **On Timer** button on the remote control to change the time setting while On timer indicator is blinking.

   You can set the time up to 24 hours, increasing in 30 minute unit up to first 3 hours and in hourly unit after first 3 hours.



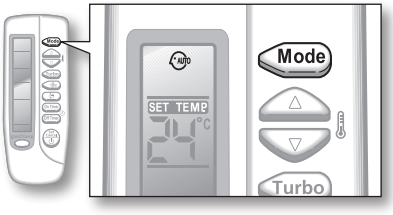
3. Press the **Power ⏻ & Set/Cancel** button on the remote control to active it on.

   The remote control display will show the hour(s) you have set.
   The air conditioner will operate automatically at set time and then On timer indicator disappears. If On timer is not set within 10 seconds, the air conditioner will end setting.

4. Set the operating mode.

   Press the **Mode** button on the remote control until the desired mode appears on the remote control display.

   The air conditioner will operate in the mode you set.



On timer function is available in Auto/Cool/Dry/Fan/Heat mode.

- Temperature can also be adjusted.(See step 3 on page 13 for instructions.)
- After the set up while the unit is off, approximately after 10 seconds, all the other indicators will be gone except the On timer indicator and remaining time.
- Setting time allows you to change by pressing the **On Timer** button. Press the **On Timer** button to change time setting and then press the **Power ⏻ & Set/Cancel** button to active it on.

To deactivate the On timer

1. Press the **Power ⏻ & Set/Cancel** button on the remote control.

   On timer you set will be canceled and On timer indicator will disappear.

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Using advanced functions

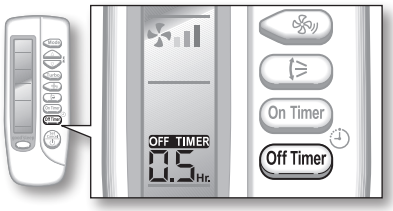
SETTING THE TIMER

Off timer

This function allows you to turn off the air conditioner automatically within the time range of 24 hours. Off timer is functional when the unit is operating.

1. Press the **Off Timer** button on the remote control.

Off timer indicator blinks on the remote control display.



2. Set the time you want the air conditioner to turn off automatically.

Press the **Off Timer** button on the remote control to change the time setting while Off timer indicator is blinking.

You can set the time up to 24 hours, increasing in 30 minute unit up to first 3 hours and in hourly unit after first 3 hours.

3. Press the **Power ⏻ & Set/Cancel** button on the remote control to active it on.

The remote control display will show the hour(s) you have set.
The air conditioner will turn off automatically at set time and then Off timer indicator disappears. If Off timer is not set within 10 seconds, the air conditioner will end setting.

- Setting time allows you to change by pressing the **Off Timer** button. Press the **Off Timer** button to change the time setting and then press the **Power ⏻ & Set/Cancel** button to active it on.
- You can combine Off timer function with On timer function to turn on and then off the air conditioner at the desired time.(See page 21 for instructions.)

To deactivate the Off timer

1. Press the **Power ⏻ & Set/Cancel** button on the remote control.

Off timer you set will be canceled and Off timer indicator will disappear.

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Combining On timer and Off timer

You can combine the On timer and Off timer together for more convenient use of the timer function.

1. Set the On timer.

   Press the **On Timer** button.

   Set the time with **On Timer** button.

   Press **Power** ⏻ **& Set/Cancel** button to activate the On timer.

See page 19 for more detail instructions on setting On timer.

2. Set the Off timer.

   Press the **Off Timer** button.

   Set the time with **Off Timer** button.

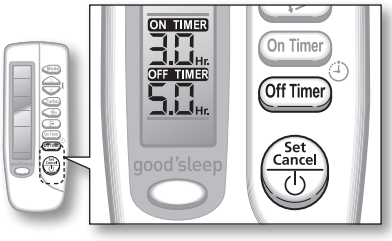
   Press **Power** ⏻ & **Set/Cancel** button to activate the Off timer.

   When you set the time, there can be two possible options:

   On timer is shorter than Off timer

   The air conditioner will turn on and then off automatically. Set up should be done while the air conditioner is off.

   For example, If the On timer is set at 3 hours and the Off timer at 5 hours, the air conditioner will turn off automatically 3 hours after the set time and then operate for next 2 hours before turning off automatically.



   On timer is longer than Off timer

   The air conditioner will turn off and then on automatically. Set up should be done while the air conditioner is operating.

   For example, If the On timer is set at 3 hours and the Off timer at 1 hour, the air conditioner will turn off automatically an hour after the set time and remain off for 2 hours before turning on automatically.

See page 20 for more detail instructions on setting Off timer.

To deactivate the timer combination

1. Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

Both of the On and Off timer will be canceled and the indicators will disappear.

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Using advanced functions

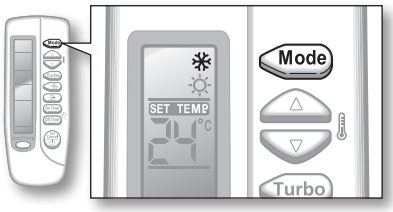
SETTING THE TIMER

good' sleep mode

good' sleep mode allows you to set a comfortable sleep temperature while saving energy and having sound sleep. good' sleep mode can be set up when the air conditioner is on.

1. Set the operating mode.

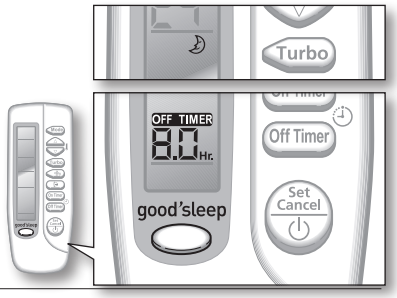
Press the **Mode** button on the remote control until Cool/Heat appears on the remote control display.



good' sleep is only available in Cool/Heat mode.

2. Press the good' sleep button on the remote control.

good' sleep indicator and Off timer indicator appear on the remote control display.



3. Set the length of time you want the air conditioner to stay on.

Default good' sleep time is set to 8 hours. Press good' sleep button on the remote control to change the time setting while Off timer indicator is blinking.

You can set the time up to 12 hours, increasing in 30 minute unit up to first 3 hours and in hourly unit after first 3 hours.

4. Press the **Power** ⏻ **& Set/Cancel** button on the remote control to active it on.

The remote control display will show the hour(s) you have set.
When the set time has elapsed, the air conditioner will automatically turn off and then good' sleep indicator disappears.
If good' sleep mode is not set within 10 seconds, the air conditioner will end setting.

- Temperature/Fan speed/Air swing can be adjusted after setting good' sleep in Heat mode.
- Temperature can be adjusted and the air conditioner automatically adjusts the Fan speed/ Air swing after setting good' sleep in Cool mode.

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Temperature changes in good' sleep mode

To prevent excessive cooling/heating during sleep, the good' sleep mode automatically modifies the temperature setting in accordance with the time setting. Temperature and air current change according to the three stages; Fall asleep, Sound sleep, and Wake up from good' sleep mode, and then the air conditioner will automatically turn off when the set time has elapsed.

Three stage good' sleep prevents you from having difficulty sleeping in summer/winter night.

① **Fall asleep** : Eases you into sleep by dropping the temperature.

② **Sound sleep** : Relaxes your body and raises your temperature slightly.

③ **Wake up from** good' sleep **mode** :
Allows you to wake up from comfortable intermittent air and it makes you feel refresh.

- Set Off timer in good' sleep mode over 5 hours. You feel disturbed sleep if the good' sleep is set too short or long because the default is set to 8-hour-operation.
- If the good' sleep mode is set less than 4 hours, the operation will stop at the set time. If the good' sleep mode is set over 5 hours, it will run as Wake up stage for the last one hour before stop.
- Recommended set temperature is between 25˚C~27˚C for cooling and 21˚C~23˚C for heating.

To deactivate good' sleep mode

1. Press the **Power** ⏻ **& Set/Cancel** button on the remote control.

good' sleep mode you set will be canceled and good' sleep indicator will disappear.

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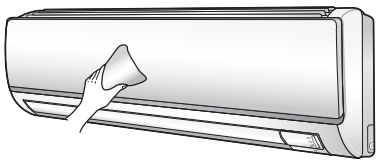
Cleaning and maintaining the air conditioner

CLEANING THE EXTERIOR

1. Wipe the surface of the unit with a slightly wet or dry cloth when needed.



CAUTION Do not use Benzene, Thinner or Clorox™. They may damage the surface of the air conditioner and can create a risk of fire.

CLEANING THE FILTER

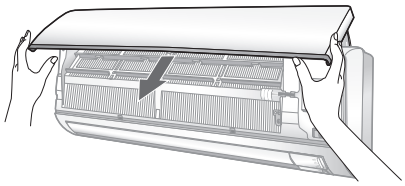
When cleaning the filter, make sure to unplug the power from the unit. No special tools are needed to clean it.

Air filter

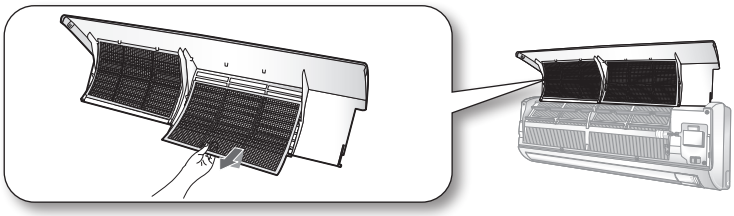
Washable foam based air filter captures large particles from the air. The filter is cleaned with a vacuum or by hand washing.

1. Remove the front panel.

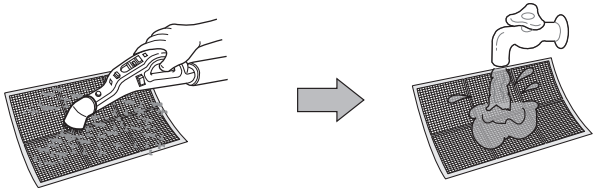
   Tightly grab both side of the front panel and lift up the panel to open. Then slide the panel towards you to remove the panel.



2. Grab the handle and lift it up. Then, pull the Air filter towards you.



3. Clean the Air filter with a vacuum cleaner or soft brush. If dust is too heavy, then rinse it with running water and dry it in a ventilated area.



- For the best conditions, repeat every two weeks.
- If the Air filter dries in a confined(or humid) area, odors may generate. If it occurs, re-clean and dry it in a well-ventilated area.

4. Insert the Air filter back in its original position.
5. Close the front panel.

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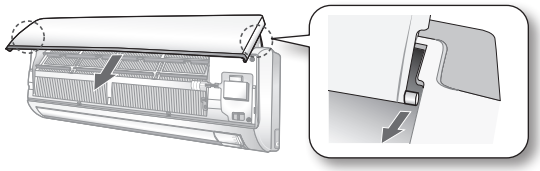
Anti-allergy filter

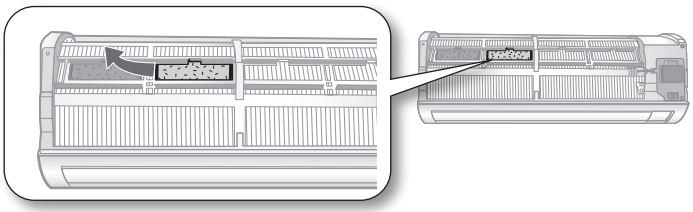
Washable foam based Anti-allergy filter leads to reduction in allergens that thrive in polluted air. The filter is cleaned with a vacuum or by hand washing.

1. Remove the front panel.

Tightly grab both side of the front panel and lift up the panel to open. Then slide the panel towards you to remove the panel.

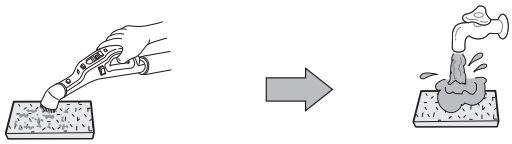


2. Slide the Anti-allergy filter(color in sky-blue) out to remove it from the slot.



- Anti-allergy filter can be placed in any 4 slots beneath the air filter.
- Front panel of your air conditioner is actually not detachable.

3. Clean the Anti-allergy filter with a vacuum cleaner or soft brush. Then rinse it with running water and dry it in a ventilated area.



4. Install the Anti-allergy filter back in position.

5. Close the front panel.

Clean the Anti-allergy filter every 3 months. The cleaning term may differ on usage and environmental conditions.

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Cleaning and maintaining the air conditioner

REPLACING THE FILTER

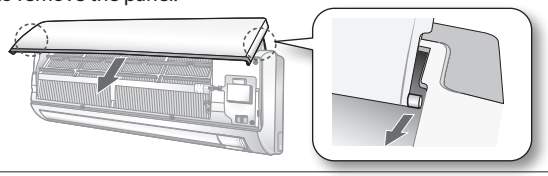
Replacement filter may be purchased from the retail store or ordered from the dealer where you purchased the unit. If you cannot find one, please call a contact center.

Deodorizing filter

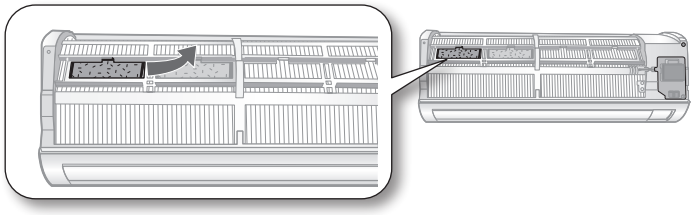
Deodorizing filter absorbs efficiently cigarette smoke, pet odors and other unpleasant smells. Deodorizing filter cleaning is simple, just remove old filter and install a new one.

1. Remove the front panel.

Tightly grab both side of the front panel and lift up the panel to open. Then slide the panel towards you to remove the panel.



2. Slide the Deodorizing filter(color in black) out to remove it from the slot.



- Deodorizing filter can be placed in any 4 slots beneath the air filter.
- Front panel of your air conditioner is actually not detachable.

3. Install the new Deodorizing filter back in position.

4. Close the front panel.

- The replacement timing of the Deodorizing filter differs depending on usage and environmental conditions.
- Even if Deodorizing and Anti-allergy filters are installed in an inverted position, it will not affect its filtration system.

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MAINTAINING YOUR AIR CONDITIONER

If the air conditioner will not be used for an extended period of time, dry the air conditioner to maintain it in best condition.

1. Dry the air conditioner thoroughly by operating in Fan mode for 3 to 4 hours and disconnect the power plug. There may be internal damage if moisture is left in components.
2. Before using the air conditioner again, dry the inner components of the air conditioner again by running in Fan mode for 3 to 4 hours. This helps remove odors which may have generated from dampness.

Periodical checks

Refer to the following chart to maintain the air conditioner properly.

Type	Description	Monthly	Every 4 months	Once a year
Indoor unit	Clean the air filter (1)	●		
	Clean the condensate drain pan (2)			●
	Thoroughly clean the heat exchanger (2)			●
	Clean the condensate drain pipe (2)		●	
	Replace the remote control batteries (1)			●
Outdoor unit	Clean the heat exchanger on the outside of the unit (2)		●	
	Clean the heat exchanger on the inside of the unit (2)			●
	Clean the electric components with jets of air (2)			●
	Verify that all the electric components are firmly tightened (2)			●
	Clean the fan (2)			●
	Verify that all the fan assembly is firmly tightened (2)			●
	Clean the condensate drain pan (2)			●

The checks and maintenance operations described are essential to guarantee the efficiency of the air conditioner. The frequency of these operations varies according to the characteristics of the area, the amount of dust, etc.

(1) The described operations should be performed more frequently if the area of installation is very dusty.

(2) These operations must always be performed by qualified personnel. For more detailed information, see the Installation Manual.

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Cleaning and maintaining the air conditioner

MAINTAINING YOUR AIR CONDITIONER

Internal protections via the unit control system

This internal protection operates if an internal fault occurs in the air conditioner.

Type	Description
Against cold air	The internal fan will be off to against cold air when the heat pump is heating.
De-ice cycle	The internal fan will be off to against cold air when the heat pump is heating.
Anti-protection of internal battery	The compressor will be off to protect internal battery when the air conditioner operates in Cool mode.
Protect compressor	The air conditioner does not start operating immediately to protect the compressor of the outdoor unit after it has been started.

If the heat pump is operating in Heat mode, De-ice cycle is actuated to remove frost from an outdoor unit that may have deposited at low temperatures.

The internal fan is switched off automatically and restarted only after the de-ice cycle is completed.

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Appendix

TROUBLESHOOTING

Refer to the following chart if the air conditioner operates abnormally. This may save time and unnecessary expenses.

PROBLEM	SOLUTION
The air conditioner does not operate immediately after it has been restarted.	• Because of the protective mechanism, the appliance does not start operating immediately to keep the unit from overloading. The air conditioner will start in 3 minutes.
The air conditioner does not work at all.	• Check that the power plug is properly connected. Insert the power plug into the wall socket correctly. • Check if the circuit breaker is switched off. • Check if there is a power failure. • Check your fuse. Make sure it is not blown out.
The temperature does not change.	• Check if you selected Fan mode. Press the **Mode** button on the remote control to select another mode.
The cool(warm) air does not come out of the air conditioner.	• Check if the set temperature is higher(lower) than the current temperature. Press the **Temperature** ▲ or ▼ button on the remote control to change the set temperature. Press the **Temperature** ▲ or ▼ button to increase or decrease the temperature. • Check if the air filter is blocked by dirt. Clean the Air filter every two weeks. • Check if the air conditioner has just been turned on. If so, wait 3 minutes.
The fan speed does not change.	• Check if you selected Auto or Dry mode. The air conditioner automatically adjusts the fan speed to Auto in Auto/Dry mode.
Timer function does not set.	• Check if you press the **Power** ⏻ **& Set/Cancel** button on the remote control after you have set the time.
Odors permeate in the room during operation.	• Check if the appliance is running in a smoky area or if there is a smell entering from outside. Operate the air conditioner in Fan mode or open the windows to air out the room.
The air conditioner makes a bubbling sound.	• A bubbling sound may be heard when the refrigerant is circulating through the compressor. Let the air conditioner operate in a selected mode.
Water is dripping from the air flow blades.	• Check if the air conditioner has been cooling for an extended period of time with the air flow blades pointed downwards. Condensation may generate due to the difference in temperature.
Remote control is not working.	• Check if your batteries are depleted. • Make sure batteries are correctly installed. • Make sure nothing is blocking your remote control sensor. • Check that there are strong lighting apparatus near the air conditioner. Strong light which comes from fluorescent bulbs or neon signs may interrupt the electric waves.

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Appendix

OPERATION RANGES

The table below indicates the temperature and humidity ranges the air conditioner can be operated within. Refer to the table for efficient use.

MODE	OPERATIONAL TEMPERATURE		INDOOR HUMIDITY	IF OUT OF CONDITIONS
	INDOOR	OUTDOOR		
COOLING	18˚C to 32˚C	-5˚C to 43˚C	80% or less	Condensation may occur on the indoor unit with risk to have either water blow off or drops on the floor.
HEATING	27˚C or less	-20˚C to 24˚C	-	Internal protection triggers and the air conditioner will stop.
DRYING	18˚C to 32˚C	-5˚C to 43˚C	-	Condensation may occur on the indoor unit with risk to have either water blow off or drops on the floor.

The standardized temperature for heating is 7˚C. If the outdoor temperature drops to 0˚C or below, the heating capacity can be reduced depending on the temperature condition.

If the cooling operation is used at over 32˚C (indoor temperature), it does not cool at its full capacity.

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Safety precautions

(Carefully follow the precautions listed below because they are essential to guarantee the safety of the equipment.)

WARNING

- Always disconnect the air conditioner from the power supply before servicing it or accessing its internal components.
- Verify that installation and testing operations are performed by qualified personnel.
- Verify that the air conditioner is not installed in an easily accessible area.

General information

- Carefully read the content of this manual before installing the air conditioner and store the manual in a safe place in order to be able to use it as reference after installation.
- For maximum safety, installers should always carefully read the following warnings.
- Store the operation and installation manual in a safe location and remember to hand it over to the new owner if the air conditioner is sold or transferred.
- This manual explains how to install an indoor unit with a split system with two SAMSUNG units. The use of other types of units with different control systems may damage the units and invalidate the warranty. The manufacturer shall not be responsible for damages arising from the use of non compliant units.
- The air conditioner is compliant with the requirements of the Low Voltage Directive (72/23/EEC), the EMC Directive (89/336/EEC), and the Directive on pressurized equipment (97/23/EEC).
- The manufacturer shall not be responsible for damage originating from unauthorized changes or the improper connection of electric and hydraulic lines. Failure to comply with these instructions or to comply with the requirements set forth in the "Operating limits" table, included in the manual, shall immediately invalidate the warranty.
- The air conditioner should be used only for the applications for which it has been designed: the indoor unit is not suitable to be installed in areas used for laundry.
- Do not use the units if damaged. If problems occur, switch the unit off and disconnect it from the power supply.
- In order to prevent electric shocks, fires or injuries, always stop the unit, disable the protection switch and contact SAMSUNG's technical support if the unit produces smoke, if the power cable is hot or damaged or if the unit is very noisy.
- Always remember to inspect the unit, electric connections, refrigerant tubes and protections regularly. These operations should be performed by qualified personnel only.
- The unit contains moving parts, which should always be kept out of the reach of children.
- Do not attempt to repair, move, alter or reinstall the unit. If performed by unauthorized personnel, these operations may cause electric shocks or fires.
- Do not place containers with liquids or other objects on the unit.
- All the materials used for the manufacture and packaging of the air conditioner are recyclable.
- The packing material and exhaust batteries of the remote control (optional) must be disposed of in accordance with current laws.
- The air conditioner contains a refrigerant that has to be disposed of as special waste. At the end of its life cycle, the air conditioner must be disposed of in authorized centers or returned to the retailer so that it can be disposed of correctly and safely.

Installing the unit

IMPORTANT: When installing the unit, always remember to connect first the refrigerant tubes, then the electrical lines. Always disassemble the electric lines before the refrigerant tubes.

- Upon receipt, inspect the product to verify that it has not been damaged during transport. If the product appears damaged, DO NOT INSTALL it and immediately report the damage to the carrier or retailer (if the installer or the authorized technician has collected the material from the retailer.)
- After completing the installation, always carry out a functional test and provide the instructions on how to operate the air conditioner to the user.
- Do not use the air conditioner in environments with hazardous substances or close to equipment that release free flames to avoid the occurrence of fires, explosions or injuries.

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Safety precautions

- To prevent injury when accidentally touching the indoor unit fan, install the indoor unit at least 2.5m above the floor.
- The air conditioner should be used only for the applications for which it has been designed: the indoor unit is not suitable to be installed in areas used for laundry.
- Our units must be installed in compliance with the spaces indicated in the installation manual to ensure either accessibility from both sides or ability to perform routine maintenance and repairs. The units' components must be accessible and that can be disassembled in conditions of complete safety either for people or things.
  For this reason, where it is not observed as indicated into the Installation Manual, the cost necessary to reach and repair the unit (in safety, as required by current regulations in force) with slings, trucks, scaffolding or any other means of elevation won't be considered in-warranty and charged to end user.

Power supply line, fuse or circuit breaker

- Always make sure that the power supply is compliant with current safety standards. Always install the air conditioner in compliance with current local safety standards.
- Always verify that a suitable grounding connection is available.
- Verify that the voltage and frequency of the power supply comply with the specifications and that the installed power is sufficient to ensure the operation of any other domestic appliance connected to the same electric lines.
- Always verify that the cut-off and protection switches are suitably dimensioned.
- Verify that the air conditioner is connected to the power supply in accordance with the instructions provided in the wiring diagram included in the manual.
- Always verify that electric connections (cable entry, section of leads, protections…) are compliant with the electric specifications and with the instructions provided in the wiring scheme. Always verify that all connections comply with the standards applicable to the installation of air conditioners.

- ***Make sure that you earth the cables.***
  - Do not connect the earth wire to the gas pipe, water pipe, lighting rod or telephone wire. If earthing is not complete, electric shock or fire may occur.
- ***Install the circuit breaker.***
  - If the circuit breaker is not installed, electric shock or fire may occur.
- ***Make sure that the condensed water dripping from the drain hose runs out properly and safely.***
- ***Install the power cable and communication cable of the indoor and outdoor unit at least 1m away from the electric appliance.***
- ***Install the indoor unit away from lighting apparatus using the ballast.***
  - If you use the wireless remote control, reception error may occur due to the ballast of the lighting apparatus.
- ***Do not install the air conditioner in following places.***
  - Place where there is mineral oil or arsenic acid.
  Resin parts flame and the accessories may drop or water may leak.
  The capacity of the heat exchanger may reduce or the air conditioner may be out of order.
  - The place where corrosive gas such as sulfurous acid gas generates from the vent pipe or air outlet.
  The copper pipe or connection pipe may corrode and refrigerant may leak.
  - The place where there is a machine that generates electromagnetic waves.
  The air conditioner may not operate normally due to control system.
  - The place where there is a danger of existing combustible gas, carbon fiber or flammable dust.
  The place where thinner or gasoline is handled.
  Gas may leak and it may cause fire.

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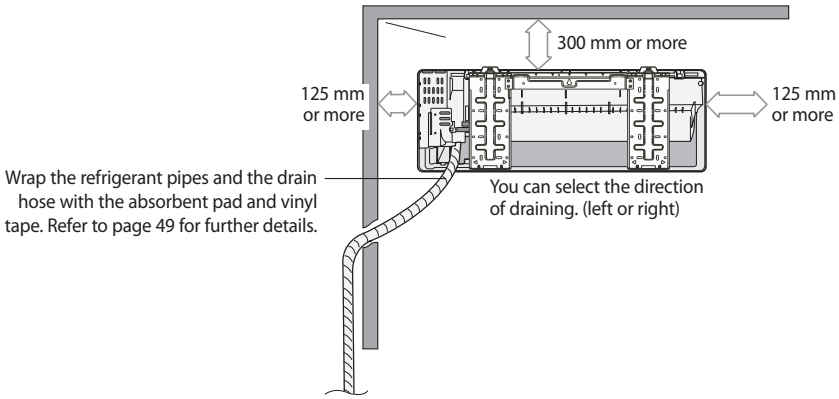
Choosing the installation location

- Where airflow is not blocked
- Where cool air can be distributed throughout the room
- Install the refrigerant piping length and the height difference of both indoor and outdoor units as indicated in the installation diagram
- Wall that prevents vibration and is strong enough to hold the product weight
- Out of the direct sunlight
- 1m or more away from the TV or radio (to prevent the screen from being distorted or noise from being generated)
- As far away as possible from fluorescent and incandescent lights (so that the remote control can be operated well)
- A place where the air filter can be replaced easily

CAUTION

- ***Avoid the following places to prevent malfunction of the unit***
  - ***Where there is machine oil***
  - ***Where sulfide gas exists***
  - ***Salty environment such as the seaside areas***
  - ***Other special atmosphere areas***

Observe the clearances and maximum lengths as seen in the picture below when installing the air conditioner.


300 mm or more
125 mm or more
125 mm or more
Wrap the refrigerant pipes and the drain hose with the absorbent pad and vinyl tape. Refer to page 49 for further details.
You can select the direction of draining. (left or right)

❉ The appearance of the unit may be different from the diagram depending on the model.

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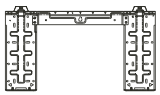
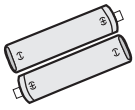
Accessories

The following accessories are supplied with the air conditioner:

➢ ***The number of each accessory is indicated in parentheses.***

Accessories in the Indoor Unit Case

Installation Plate	Remote Control	Batteries for Remote Control	User & Installation Manual
			

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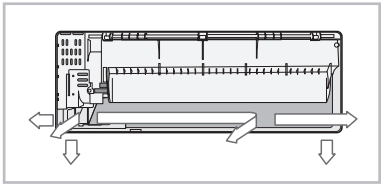
Fixing the installation plate

Before fixing the installation plate to the wall or window frame, you must determine the position of the 65mm hole through which the cable, pipe and hose pass to connect the indoor unit to the outdoor unit.

When facing the wall, the pipe and cable can be connected from the:

- ***Right***
- ***Left***
- ***Underside (right)***
- ***Rear (right or left)***

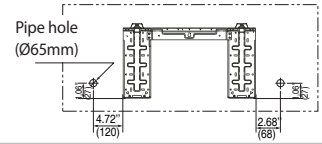


1 Determine the position of the pipe and drain hose hole as seen in the picture and drill the hole with an inner diameter of 65mm so that it slants slightly downwards.

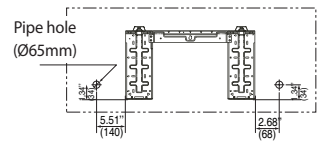
2

If you fix the indoor unit to a...	*Follow step(s)...*
Wall	3.
Window frame	4 to 6.

(Unit : mm) ✳✳020/032/040✳✳



(Unit : mm) ✳✳056/060/072✳✳



3 Fix the installation plate to the wall giving attention to the weight of the indoor unit.

➢ If you mount the plate to a concrete wall with anchor bolts, the anchor bolts must not project more than 20mm.

4 Determine the positions of the wooden uprights to be attached to the window frame.

5 Attach the wooden uprights to the window frame giving attention to the weight of the indoor unit.

6 Attach the installation plate to the wooden uprights using tapping screws as seen in the picture.

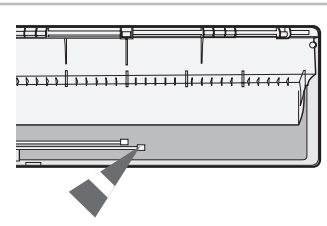
Purging the indoor unit

Upon delivery, there may be inert gas inside the indoor unit. Purge the gas from the indoor unit before connecting the assembly pipe.

1 Unscrew the caps at the end of each pipe.

Result: All inert gas escapes from the indoor unit.

Note To prevent dirt or foreign substances from getting into the pipes during installation, do NOT remove the caps completely until you are ready to connect the pipe.



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Installing and connecting the assembly pipe of the indoor unit

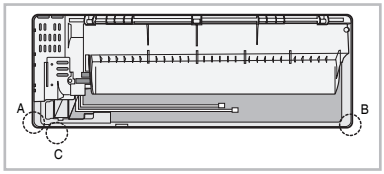
Connect indoor and outdoor units with field-supplied copper pipes by means of flare connections. Use insulated seamless refrigeration grade pipe only, (Cu DHP type according to ISO1337), degreased and deoxidized, suitable for operating pressures of at least 4200 kPa and for burst pressure of at least 20700 kPa. Under no circumstances must sanitary type copper pipe be used.

There are 2 refrigerant pipes of different diameters:

- ***The smaller one is for the liquid refrigerant***
- ***The larger one is for the gas refrigerant***

A short pipe is already fitted to the air conditioner. You may need to extend the pipe using the assembly pipe. (optional)
The connection procedure for the refrigerant pipe varies according to the exit position of the pipe when facing the wall:

- ***Right (A)***
- ***Left (B)***
- ***Underside (C)***
- ***Rear***



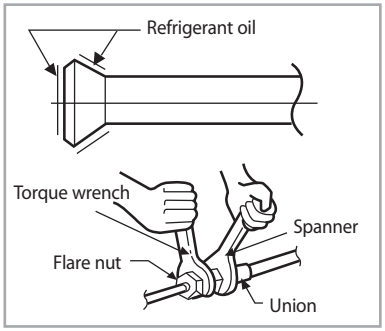
1 Cut out the appropriate knock-out piece on the rear of the indoor unit unless you connect the pipe directly from the rear.

2 Smooth the cut edges.

3 Remove the protection caps of the pipes and connect the assembly pipe to each pipe. Tighten the nuts first with your hands, and then with a torque wrench, applying the following torque:

Outer Diameter	Torque (kgf•cm)
6.35 mm (1/4")	145~175
9.52 mm (3/8")	333~407
12.70 mm (1/2")	505~615
15.88 mm (5/8")	630~769

➢ If you want to shorten or extend pipes, refer to page 41.



4 Cut off the remaining foam insulation.

5 If necessary, bend the pipe to fit along the bottom of the indoor unit.
Then pull it out through the appropriate hole.

- The pipe should not project from the rear of the indoor unit.
- The bending radius should be 100 mm or more.

6 Pass the pipe through the hole in the wall.

7 For further details on how to connect to the outdoor unit and purge the air, refer to page 35.

➢ ***The pipe will be insulated and fixed permanently into position after finishing the installation and the gas leak test; refer to page 49 for further details.***

➢ ***DO NOT WALL UP THE PIPE CONNECTION !***
All refrigerant pipe connection must be easy accessible and serviceable.

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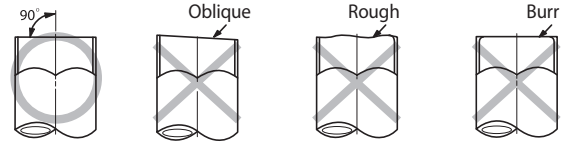
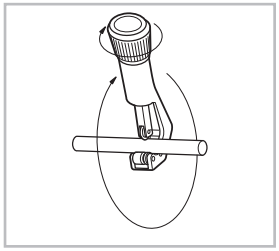
Cutting or extending the pipe

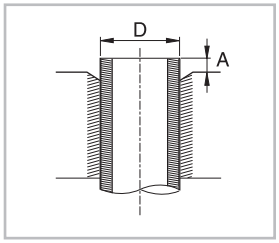
1 Make sure that you prepared the required tools.
(pipe cutter, reamer, flaring tool and pipe holder)

2 If you want to shorten the pipe, cut it using a pipe cutter ensuring that the cut edge remains at 90° with the side of the pipe. There are some examples of correctly and incorrectly cut edges below.

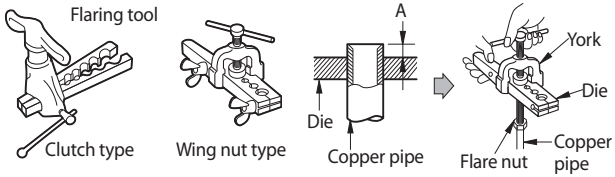




3 To prevent a gas leak, remove all burrs at the cut edge of the pipe using a reamer.



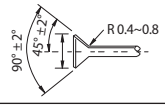
4 Carry out flaring work using flaring tool as shown below.

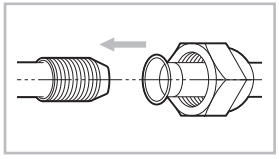


Outer diameter (mm)	A(mm)		
	Flare tool for R410A clutch type	Conventional flare tool	
		Clutch type	Wing nut type
6.35	0~0.5	1.0~1.5	1.5~2.0
9.52	0~0.5	1.0~1.5	1.5~2.0
12.70	0~0.5	1.0~1.5	1.5~2.0
15.88	0~0.5	1.0~1.5	1.5~2.0

5 Check if you flared the pipe correctly. There are some examples of incorrectly flared pipes below.

6 Align the pipes and tighten the flare nuts first manually and then with a torque wrench, applying the following torque.

Outer diameter (mm)	Connection Torque (kgf•cm)	Flare dimension (mm)	Flare shape (mm)
6.35	145~175	8.70~9.10	
9.52	333~407	12.80~13.20	
12.70	505~615	16.20~16.60	
15.88	630~769	19.30~19.70	



CAUTION

In case of needing brazing, you must work with Nitrogen gas blowing.

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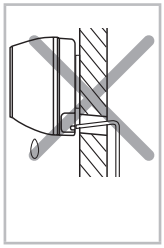
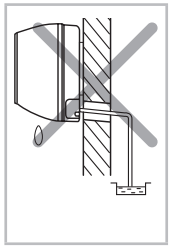
Installing and connecting the drain hose of the indoor unit

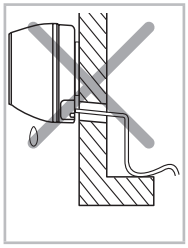
When installing the drain hose for the indoor unit, check if condensation draining is adequate. When passing the drain hose through the 65-mm hole drilled in the wall, check the following:



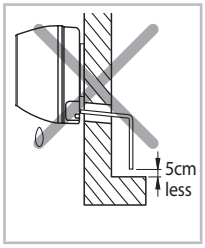
The hose must NOT slant upwards.



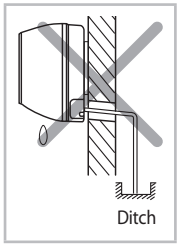
The end of the drain hose must NOT be placed under water.



Do NOT bend the hose in different directions.



Keep a clearance of at least 5cm between the end of the hose and the ground.



Do NOT place the end of the drain hose in a hollow.

Drain hose installation:

1 If necessary, connect the 2-meter extension drain hose to the drain hose.

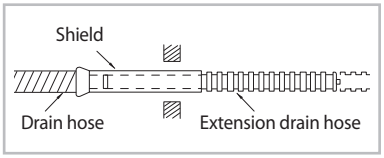
2 If you use the extension drain hose, insulate the inside of the extension drain hose with a shield.

3 Fit the drain hose into 1 of 2 drain hose holes, then fix the end of the drain hose tightly with a clamp.

➢ If you don't use the other drain hose hole, block it with a rubber stopper.

4 Pass the drain hose under the refrigerant pipe, keeping the drain hose tight.

5 Pass the drain hose through the hole in the wall. Check if it slants downwards as seen in the picture.



➢ ***The hose will be fixed permanently into position after finishing the installation and the gas leak test; refer to page 49 for further details.***

➢ ***DO NOT WALL UP THE DRAIN HOSE CONNECTION ! Drain hose connection must be easy accessible and serviceable.***

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Changing direction of the drain hose

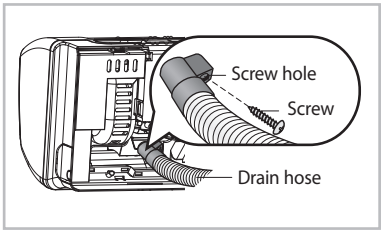
You can select the direction of the drain hose, depending on where you want to install the indoor unit.

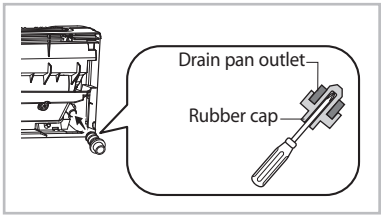
1 Detach the rubber cap with the flyer.

2 Detach the drain hose by pulling it and turning to the left.

3 Insert the drain hose by fixing it into the groove of the drain hose and the outlet of the drain pan.

4 Attach the rubber cap with a screwdriver by turning it to the right until it fixes to the end of the groove.





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Wiring work

Power and communication cable connection

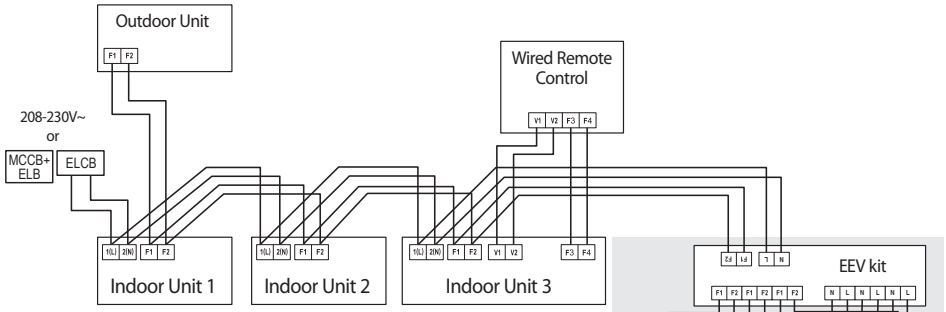
1 Before wiring work, you must turn off all power source.

2 Indoor unit power should be supplied through the breaker(ELCB or MCCB+ELB) separated by the outdoor power.
ELCB:Earth Leakage Circuit Breaker
MCCB:Molded Case Circuit Breaker
ELB:Earth Leakage Breaker

3 The power cable should be used only copper wires.

4 Connect the power cable{1(L), 2(N)} among the units within maximum length and communication cable(F1, F2) each.

5 Connect V1, V2(for DC12V) and F3, F4(for communication) when installing the wired remote control.

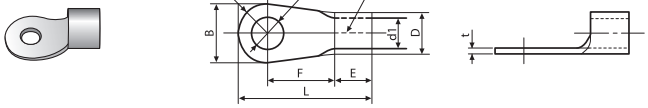


❊ ELCB : Essential Installation

WARNING :
Power off before connecting any wires;
Indoor PBA will be damaged while V1,V2,F3,F4 short each other.

❊ Ceiling, wall-mounted indoor unit.

Selecting compressed ring terminal



Norminal dimensions for cable (mm^2)	Norminal dimensions for screw (mm)	B		D		d1		E	F	L	d2		t
		Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Min.	Min.	Max.	Standard dimension (mm)	Allowance (mm)	Min.
1.5	4	6.6	±0.2	3.4	+0.3 -0.2	1.7	±0.2	4.1	6	16	4.3	+0.2 0	0.7
	4	8											
2.5	4	6.6	±0.2	4.2	+0.3 -0.2	2.3	±0.2	6	6	17.5	4.3	+0.2 0	0.8
	4	8.5											
4	4	9.5	±0.2	5.6	+0.3 -0.2	3.4	±0.2	6	5	20	4.3	+0.2 0	0.9

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Specification of electronic wire

Power supply	MCCB	ELB or ELCB	Power cable	Earth cable	Communication cable
Max : 242V Min : 198V	XA	XA, 30mmA 0.1 sec	2.5mm^2	2.5mm^2	0.75~1.5mm^2

◆ Decide the capacity of ELCB(or MCCB+ELB) by below formula.

The capacity of ELCB(or MCCB+ELB) X[A] = 1.25 X 1.1 X ∑Ai

✳ X : The capacity of ELCB(or MCCB+ELB).
✳ ∑Ai : Sum of Rating currents of each indoor unit.
✳ Refer to each installation manual about the rating current of indoor unit.

❇ Rating current

Unit	Model	Rating current
ND✳✳✳QH✳✳✳	✳✳020✳✳	0.16A
	✳✳032✳✳	0.16A
	✳✳040✳✳	0.18A
	✳✳052✳✳	0.27A
	✳✳060✳✳	0.27A

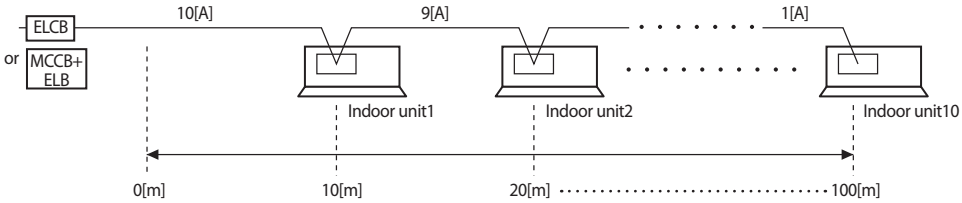
◆ Decide the power cable specification and maximum length within 10% power drop among indoor units.

$$\sum_{k=1}^{n}\left(\frac{Coef\times 35.6\times L_k\times i_k}{1000\times A_k}\right) < \text{10\% of input voltage[V]}$$

✳ coef: 1.55
✳ Lk: Distance among each indoor unit[m], Ak: Power cable specification[mm^2]
ik: Running current of each unit[A]

Example of Installation

- Total power cable length L = 100(m), Running current of each units 1[A]
- Total 10 indoor units were installed

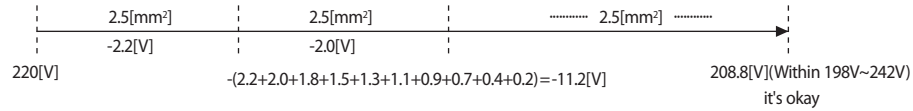


◆ Apply following equation.

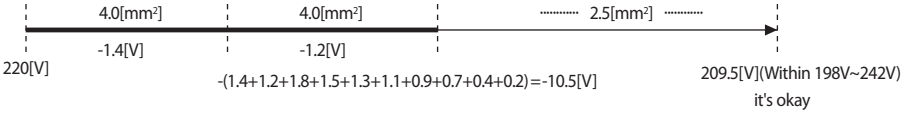
$$\sum_{k=1}^{n}\left(\frac{Coef\times 35.6\times L_k\times i_k}{1000\times A_k}\right) < \text{10\% of input voltage[V]}$$

❇ Calculation

● Installing with 1 sort wire.



● Installing with 2 different sort wire.



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Wiring work

CAUTION

- ***Select the power cable in accordance with relevant local and national regulations.***
- ***Wire size must comply with local and national code.***
- ***For the power cable, use the grade of H07RN-F or H05RN-F materials.***
- ***You should connect the power cable into the power cable terminal and fasten it with a clamp.***
- ***The unbalanced power must be maintained within 10% of supply rating among whole indoor units.***
- ***If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 10% of supply rating, the indoor unit is protected, stopped and the error mode indicates.***
- ***To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units in the iron pipe.***
- ***Connect the power cable to the auxiliary circuit breaker.***
  An all pole disconnection from the power supply must be incorporated in the fixed wiring(≥3mm).
- ***You must keep the cable in a protection tube.***
- ***Keep distances of 50mm or more between power cable and communication cable.***
- ***Maximum length of power cables are decided within 10% of power drop. If it exceeds, you must consider another power supplying method.***
- ***The circuit breaker(ELCB or MCCB+ELB) should be considered more capacity if many indoor units are connected from one breaker.***
- ***Use round pressure terminal for connections to the power terminal block.***
- ***For wiring, use the designated power cable and connect it firmly, then secure to prevent outside pressure being exerted on the terminal board.***
- ***Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.***
- ***Over-tightening the terminal screws may break them.***
- ***See the table below for tightening torque for the terminal screws.***

Tightening torque(kgf·cm)	
M 4	12.0~14.7

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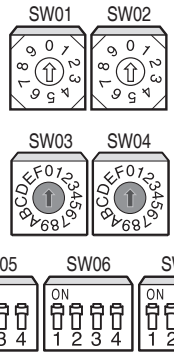
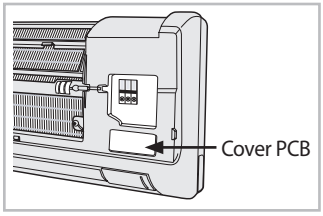
Assigning address to indoor unit

1 Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.

2 The address of the indoor unit is assigned by adjusting MAIN(SW01, SW02) and RMC(SW03, SW04) rotary switches.





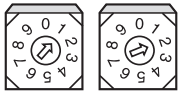
✳ The designs and shape are subject to change according to the model.

Setting Main Address

- The MAIN address is for communication between the indoor unit and the outdoor unit. Therefore, you must set it to operate the air conditioner properly.
- You can set the MAIN address from '00' to '99' by mixing SW01 and SW02. The MAIN address from '00' to '99' should differ from each other.
- Check the indoor unit address on the plan that you are to install and set the address according to the plan.

Note You may not need to set main address if you selected Auto Address Setting from the outdoor unit: see details on the outdoor unit installation manual.

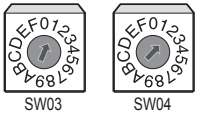
For Example **When MAIN address is set as "12".**



Setting RMC Address

- The SW03, SW04 RMC switch is the address setting switch for controlling the indoor unit with the centralized controller.
- You must set the SW03,SW04 and K2 switch when using the centralized controller.

For Example **When RMC address is set as "12".**



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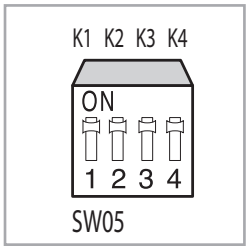
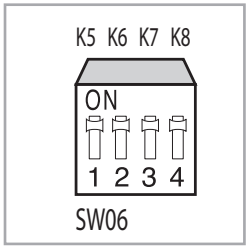
Additional functions

No.		Function	ON	OFF
SW05	K1	External room sensor	Not use	Use
	K2	Centralized controller	Not use	Use
	K3	-	-	-
	K4	-	-	-

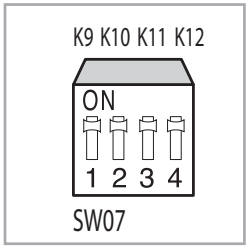


✳ K1 OFF
Heating mode : Setting temperature compensation value = 0°C
Thermo OFF → Fan OFF

No.		Function	ON	OFF
SW06	K5	Heating Current Temperature Compensation	+2℃	+5℃
	K6	Filter Time	1,000 hours	2,000 hours
	K7	-	-	-
	K8	-	-	-



No.		Function	ON	OFF
SW07	K9	Indoor Expansion Valve For Heating Stop	80 or 160 step	80 or 160 step (80 step last for at least 1 hour)
	K10	Wired Remocon Group Master	Not use	Use
	K11	External control	Not use	Use
	K12	External control output	Thermal ON	Operation ON



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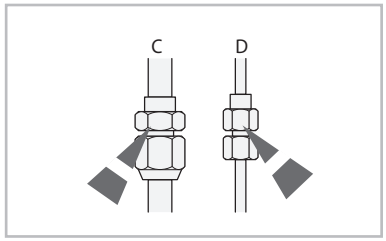
Performing leak test & insulation

Leak test

LEAK TEST WITH NITROGEN (before opening valves)
In order to detect basic refrigerant leaks, before recreating the vacuum and recirculating the R410A, it's responsible of installer to pressurize the whole system with nitrogen (using a pressure regulator) at a pressure above 4.1MPa (gauge).

LEAK TEST WITH R410A (after opening valves)
Before opening valves, discharge all the nitrogen into the system and create vacuum. After opening valves check leaks using a leak detector for refrigerant R410A.



CAUTION

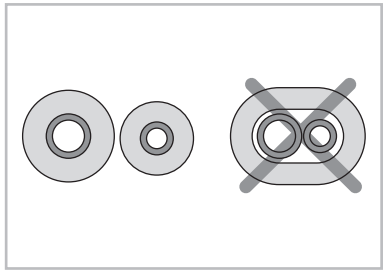
Discharge all the nitrogen to create a vacuum and charge the system.

Insulation

After checking for gas leaks in the system, insulate the pipe, hose and cables. Then place the indoor unit on the installation plate.

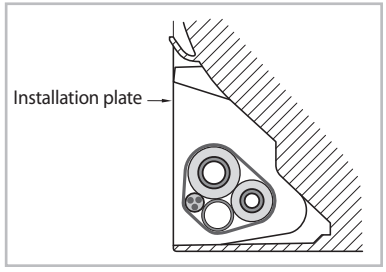
1 To avoid condensation problems, place heat-resistant polyethylene foam separately around each refrigerant pipe in the lower part of the indoor unit.

2 Wrap the refrigerant pipe and the drain hose in the rear of the indoor unit with the absorbent pad.
➢ Wind the pipe and hose three times to the end of the indoor unit with the absorbent pad. (20 mm interval)



3 Wind the pipe, assembly cable and drain hose with insulation tape.

4 Place the bundle (the pipe, assembly cable and drain hose) in the lower part of the indoor unit carefully so it doesn't project from the rear of the indoor unit.



5 Hook the indoor unit to the installation plate and move the unit to the right and left until it is securely in place.

6 Wrap the rest of the pipe with vinyl tape.

7 Attach the pipe to the wall using clamps (optional).

ENGLISH

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Final check and trial operation

To complete the installation, perform the following checks and tests to ensure that the air conditioner operates correctly.

1 Check the following.

- Strength of the installation site
- Tightness of pipe connection to detect gas leak
- Electric wiring connection
- Heat-resistant insulation of the pipe
- Drainage
- Grounding conductor connection
- Correct operation (follow the steps below)

2 Press the ⏻ button and check the following.

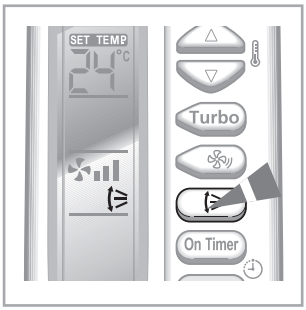
- The indicator on the indoor unit lights up.
- The airflow blade opens and the fan gears up for operation.

3 Press any button and check the following.

- The appropriate indicator lights up and the air conditioner operates according to the selected mode or function.

4 Press the button and check the following.

- The airflow blades work properly.



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Providing information for user

After finishing the installation of the air conditioner, you should explain the following to the user. Refer to appropriate pages in the user & installation manual.

1	How to start and stop the air conditioner
2	How to select the modes and functions
3	How to adjust the temperature and fan speed
4	How to adjust the airflow direction
5	How to set the timers
6	How to clean and replace the filters

Note ***When you complete the installation successfully, hand over the user & installation manual to the user for storage in a handy and safe place.***

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QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT
ARGENTINE	0800-333-3733	www.samsung.com
BRAZIL	0800-124-421 4004-0000	www.samsung.com
CHILE	800-SAMSUNG(726-7864)	www.samsung.com
COLOMBIA	01-8000112112	www.samsung.com
COSTA RICA	0-800-507-7267	www.samsung.com
DOMINICA	1-800-751-2676	www.samsung.com
ECUADOR	1-800-10-7267	www.samsung.com
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VENEZUELA	0-800-100-5303	www.samsung.com